

Development of a Composite Scoring Algorithm for the National Cancer Institute's Patient-Reported Outcomes version of the Common Terminology Criteria for Adverse Events (PRO-CTCAE)

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Final scoring algorithm for mapping of PRO-CTCAE individual item score permutations to single composite adverse event grades. Mappings are shown for all 187 PRO-CTCAE scoring permutations, including those with (A) three items, (B) two items, and (C) one item.

A.

FREQUENCY	SEVERITY	INTERFERENCE	COMPOSITE GRADE
Never (0)	None (0)	Not at all (0)	0
Rarely (1)	None (0)	Not at all (0)	0
Rarely (1)	None (0)	A little bit (1)	1
Rarely (1)	None (0)	Somewhat (2)	1
Rarely (1)	None (0)	Quite a bit (3)	2
Rarely (1)	None (0)	Very Much (4)	2
Rarely (1)	Mild (1)	Not at all (0)	1
Rarely (1)	Mild (1)	A little bit (1)	1
Rarely (1)	Mild (1)	Somewhat (2)	1
Rarely (1)	Mild (1)	Quite a bit (3)	2
Rarely (1)	Mild (1)	Very Much (4)	2
Rarely (1)	Moderate (2)	Not at all (0)	1
Rarely (1)	Moderate (2)	A little bit (1)	2
Rarely (1)	Moderate (2)	Somewhat (2)	2
Rarely (1)	Moderate (2)	Quite a bit (3)	2
Rarely (1)	Moderate (2)	Very Much (4)	3
Rarely (1)	Severe (3)	Not at all (0)	2
Rarely (1)	Severe (3)	A little bit (1)	2
Rarely (1)	Severe (3)	Somewhat (2)	2
Rarely (1)	Severe (3)	Quite a bit (3)	3
Rarely (1)	Severe (3)	Very Much (4)	3
Rarely (1)	Very Severe (4)	Not at all (0)	2
Rarely (1)	Very Severe (4)	A little bit (1)	2
Rarely (1)	Very Severe (4)	Somewhat (2)	3
Rarely (1)	Very Severe (4)	Quite a bit (3)	3

Rarely (1)	Very Severe (4)	Very Much (4)	3
Occasionally (2)	None (0)	Not at all (0)	0
Occasionally (2)	None (0)	A little bit (1)	1
Occasionally (2)	None (0)	Somewhat (2)	1
Occasionally (2)	None (0)	Quite a bit (3)	2
Occasionally (2)	None (0)	Very Much (4)	2
Occasionally (2)	Mild (1)	Not at all (0)	1
Occasionally (2)	Mild (1)	A little bit (1)	1
Occasionally (2)	Mild (1)	Somewhat (2)	1
Occasionally (2)	Mild (1)	Quite a bit (3)	2
Occasionally (2)	Mild (1)	Very Much (4)	2
Occasionally (2)	Moderate (2)	Not at all (0)	2
Occasionally (2)	Moderate (2)	A little bit (1)	2
Occasionally (2)	Moderate (2)	Somewhat (2)	2
Occasionally (2)	Moderate (2)	Quite a bit (3)	3
Occasionally (2)	Moderate (2)	Very Much (4)	3
Occasionally (2)	Severe (3)	Not at all (0)	2
Occasionally (2)	Severe (3)	A little bit (1)	2
Occasionally (2)	Severe (3)	Somewhat (2)	2
Occasionally (2)	Severe (3)	Quite a bit (3)	3
Occasionally (2)	Severe (3)	Very Much (4)	3
Occasionally (2)	Very Severe (4)	Not at all (0)	2
Occasionally (2)	Very Severe (4)	A little bit (1)	2
Occasionally (2)	Very Severe (4)	Somewhat (2)	3
Occasionally (2)	Very Severe (4)	Quite a bit (3)	3
Occasionally (2)	Very Severe (4)	Very Much (4)	3
Frequently (3)	None (0)	Not at all (0)	1
Frequently (3)	None (0)	A little bit (1)	1
Frequently (3)	None (0)	Somewhat (2)	1
Frequently (3)	None (0)	Quite a bit (3)	2
Frequently (3)	None (0)	Very Much (4)	2
Frequently (3)	Mild (1)	Not at all (0)	1
Frequently (3)	Mild (1)	A little bit (1)	1
Frequently (3)	Mild (1)	Somewhat (2)	1
Frequently (3)	Mild (1)	Quite a bit (3)	2
Frequently (3)	Mild (1)	Very Much (4)	2
Frequently (3)	Moderate (2)	Not at all (0)	2
Frequently (3)	Moderate (2)	A little bit (1)	2
Frequently (3)	Moderate (2)	Somewhat (2)	2
Frequently (3)	Moderate (2)	Quite a bit (3)	3
Frequently (3)	Moderate (2)	Very Much (4)	3

Frequently (3)	Severe (3)	Not at all (0)	2
Frequently (3)	Severe (3)	A little bit (1)	2
Frequently (3)	Severe (3)	Somewhat (2)	3
Frequently (3)	Severe (3)	Quite a bit (3)	3
Frequently (3)	Severe (3)	Very Much (4)	3
Frequently (3)	Very Severe (4)	Not at all (0)	2
Frequently (3)	Very Severe (4)	A little bit (1)	2
Frequently (3)	Very Severe (4)	Somewhat (2)	3
Frequently (3)	Very Severe (4)	Quite a bit (3)	3
Frequently (3)	Very Severe (4)	Very Much (4)	3
Almost Constantly (4)	None (0)	Not at all (0)	1
Almost Constantly (4)	None (0)	A little bit (1)	1
Almost Constantly (4)	None (0)	Somewhat (2)	1
Almost Constantly (4)	None (0)	Quite a bit (3)	2
Almost Constantly (4)	None (0)	Very Much (4)	2
Almost Constantly (4)	Mild (1)	Not at all (0)	1
Almost Constantly (4)	Mild (1)	A little bit (1)	1
Almost Constantly (4)	Mild (1)	Somewhat (2)	2
Almost Constantly (4)	Mild (1)	Quite a bit (3)	2
Almost Constantly (4)	Mild (1)	Very Much (4)	3
Almost Constantly (4)	Moderate (2)	Not at all (0)	2
Almost Constantly (4)	Moderate (2)	A little bit (1)	2
Almost Constantly (4)	Moderate (2)	Somewhat (2)	2
Almost Constantly (4)	Moderate (2)	Quite a bit (3)	3
Almost Constantly (4)	Moderate (2)	Very Much (4)	3
Almost Constantly (4)	Severe (3)	Not at all (0)	2
Almost Constantly (4)	Severe (3)	A little bit (1)	2
Almost Constantly (4)	Severe (3)	Somewhat (2)	3
Almost Constantly (4)	Severe (3)	Quite a bit (3)	3
Almost Constantly (4)	Severe (3)	Very Much (4)	3
Almost Constantly (4)	Very Severe (4)	Not at all (0)	2
Almost Constantly (4)	Very Severe (4)	A little bit (1)	2
Almost Constantly (4)	Very Severe (4)	Somewhat (2)	3
Almost Constantly (4)	Very Severe (4)	Quite a bit (3)	3
Almost Constantly (4)	Very Severe (4)	Very Much (4)	3

B.

FREQUENCY	SEVERITY	COMPOSITE GRADE
Never (0)	None (0)	0
Rarely (1)	None (0)	1
Rarely (1)	Mild (1)	1
Rarely (1)	Moderate (2)	1
Rarely (1)	Severe (3)	2
Rarely (1)	Very Severe (4)	2
Occasionally (2)	None (0)	1
Occasionally (2)	Mild (1)	1
Occasionally (2)	Moderate (2)	2
Occasionally (2)	Severe (3)	2
Occasionally (2)	Very Severe (4)	2
Frequently (3)	None (0)	1
Frequently (3)	Mild (1)	1
Frequently (3)	Moderate (2)	2
Frequently (3)	Severe (3)	3
Frequently (3)	Very Severe (4)	3
Almost Constantly (4)	None (0)	1
Almost Constantly (4)	Mild (1)	1
Almost Constantly (4)	Moderate (2)	2
Almost Constantly (4)	Severe (3)	3
Almost Constantly (4)	Very Severe (4)	3
SEVERITY	INTERFERENCE	COMPOSITE GRADE
None (0)	Not at all (0)	0
Mild (1)	Not at all (0)	1
Mild (1)	A little bit (1)	1
Mild (1)	Somewhat (2)	1
Mild (1)	Quite a bit (3)	2
Mild (1)	Very Much (4)	2
Moderate (2)	Not at all (0)	1
Moderate (2)	A little bit (1)	1
Moderate (2)	Somewhat (2)	2
Moderate (2)	Quite a bit (3)	2
Moderate (2)	Very Much (4)	3
Severe (3)	Not at all (0)	1
Severe (3)	A little bit (1)	2
Severe (3)	Somewhat (2)	2
Severe (3)	Quite a bit (3)	3
Severe (3)	Very Much (4)	3
Very Severe (4)	Not at all (0)	2

Very Severe (4)	A little bit (1)	2
Very Severe (4)	Somewhat (2)	2
Very Severe (4)	Quite a bit (3)	3
Very Severe (4)	Very Much (4)	3
FREQUENCY	INTERFERENCE	COMPOSITE GRADE
Never (0)	Not at all (0)	0
Rarely (1)	Not at all (0)	1
Rarely (1)	A little bit (1)	1
Rarely (1)	Somewhat (2)	1
Rarely (1)	Quite a bit (3)	2
Rarely (1)	Very Much (4)	2
Occasionally (2)	Not at all (0)	1
Occasionally (2)	A little bit (1)	1
Occasionally (2)	Somewhat (2)	1
Occasionally (2)	Quite a bit (3)	2
Occasionally (2)	Very Much (4)	2
Frequently (3)	Not at all (0)	1
Frequently (3)	A little bit (1)	1
Frequently (3)	Somewhat (2)	2
Frequently (3)	Quite a bit (3)	3
Frequently (3)	Very Much (4)	3
Almost Constantly (4)	Not at all (0)	1
Almost Constantly (4)	A little bit (1)	1
Almost Constantly (4)	Somewhat (2)	2
Almost Constantly (4)	Quite a bit (3)	3
Almost Constantly (4)	Very Much (4)	3

C.

FREQUENCY	COMPOSITE GRADE
Never (0)	0
Rarely (1)	1
Occasionally (2)	1
Frequently (3)	2
Almost Constantly (4)	3
SEVERITY	COMPOSITE GRADE
None (0)	0
Mild (1)	1
Moderate (2)	2
Severe (3)	3
Very Severe (4)	3
AMOUNT	COMPOSITE GRADE
Not at all (0)	0
A little bit (1)	1
Somewhat (2)	1
Quite a bit (3)	2
Very Much (4)	2